-17D

Well No.

MW-17D

PROJECT: HPI Fortuna Shell

BORING LOCATION: ALLEY WEST OF 8TH STREET

DRILLING METHOD: GEOPROBE

DRILLER: LAKE'S WELL DRILLING

DEPTH TO WATER: INITIAL \(\frac{\pi}{2} \): NA

WELL CASING: 1.5" PVC

SITE GEOLOGY: FLUVIAL TERRACE AND COLLUVIAL FAN DEPOSITS

WELL SCREEN AND INTERVAL: 10-slot, 26 - 28'

COMPLETION \ ₹: NA

LOGGED BY: JMW

PROJECT NO.: 4563.01

ELEVATION: 55 Feet msl

DATE: 11/1/04

SEAL AND INTERVAL: GROUT 1.5 - 25.5' **SAND PACK AND INTERVAL:** 25.5 - 28' #2/16 ELEVATION/ SOIL SYMBOLS, Well P.I.D Hanby SAMPLERS USCS Description Construction ppm Result **DEPTH** AND TEST DATA Diagram 55 NO RECOVERY FROM 0 TO 16 FEET BGS. 50 47.5--7.5 - 10 45 42.5--12.540 SM SILTY SAND: tan, medium dense, moist; 5% clay, 10% silt, medium plasticity, 75% fine to medium sand, 10% fine to medium SM subrounded gravel. No hydrocarbon odor or staining. SILTY SAND: tan, medium dense, moist; 5% clay, 10% silt, low

Figure

`17D

Well No.

PROJECT NO.: 4563.01

DATE: 11/1/04

MW-17D

PROJECT: HPI Fortuna Shell

BORING LOCATION: ALLEY WEST OF 8TH STREET

DRILLING METHOD: GEOPROBE

ELEVATION: 55 Feet msl DRILLER: LAKE'S WELL DRILLING LOGGED BY: JMW

DEPTH TO WATER: INITIAL $\frac{\Box}{}$: NA COMPLETION ₹ : NA SITE GEOLOGY: FLUVIAL TERRACE AND COLLUVIAL FAN DEPOSITS

WELL CASING: 1.5" PVC WELL SCREEN AND INTERVAL: 10-slot, 26 - 28'

SEAL AND I	NTERVAL: GRO	OUT 1.5	- 25.5' SAND PACK AND INTERVAL : 25.5 - 2	8' #2/10	5	
ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D ppm	Hanby Result	Well Construction Diagram
35 20			plasticity, 85% fine sand. No hydrocarbon odor or staining. SILTY SAND: tan, dense, moist; 10% clay, 15% silt, medium plasticity, 75% fine to medium sand. No hydrocarbon odor or staining. Some manganese stain. SILTY SAND: tan, medium dense, moist; 10% clay, 20% silt, 75% fine to medium sand. Slight MTBE odor. Manganese stain.			
32.5 22.5			SILTY SAND: tan, medium dense, moist; less than 5% clay, 15% silt, 85% fine sand. Slight MTBE odor. Manganese stain.			
30 - 25		SP-SM SM SP	SILTY SAND: tan, medium dense, moist; 5% clay, 10% silt, 85% fine sand. Slight MTBE odor. POORLY GRADED SAND WITH SILT; tan, loose, wet; 10% silt, low plasticity, 90% fine sand. Slight MTBE odor. SILTY SAND; tan with red, medium dense, moist; 5% clay, 15% silt, low plasticity, 80% fine sand. Slight MTBE odor. Iron stain. POORLY GRADED SAND; light tan, medium dense, moist to wet; 5% silt, 95% fine sand. MTBE odor. Iron stain.			
27.5 - 27.5		SM SM	SILTY SAND WITH GRAVEL; tan, loose, wet; less than 5% clay, 15% silt, no plasticity, 70% fine to medium sand, 10% fine subrounded to rounded gravel. MTBE odor. Iron stain. SILTY SAND; tan, medium dense, moist; 5% clay, 20% silt, low plasticity, 75% fine sand. No hydrocarbon odor or staining.			
22.5 - 32.5		SP SM	POORLY GRADED SAND; light gray tan, loose, moist; 5% silt, 95% fine sand. No hydrocarbon odor or staining. SILTY SAND; light gray tan, medium dense, moist; 10% clay, 15% silt, low plasticity, 75% fine sand. No hydrocarbon odor or staining. Large manganese nodules at 32 feet bgs. HALT AT 32 FEET BGS IN SAME.			
20 35						

Figure	
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`17S

Well No.

MW-17S

PROJECT: HPI Fortuna Shell

BORING LOCATION: ALLEY WEST OF 8TH STREET

DRILLING METHOD: GEOPROBE DRILLER: LAKE'S WELL DRILLING

DEPTH TO WATER: INITIAL \supseteq : NA

COMPLETION ¥ : NA SITE GEOLOGY: FLUVIAL TERRACE AND COLLUVIAL FAN DEPOSITS

PROJECT NO.: 4563.01

ELEVATION: 55 Feet msl

LOGGED BY: JMW

DATE: 11/1/04

WELL CASING: 1.5" PVC WELL SCREEN AND INTERVAL: 10-slot, 22.5 - 24.5' SEAL AND INTERVAL: GROUT 1.5 - 22' **SAND PACK AND INTERVAL**: 22 - 24.5' #2/16

	NIERVAL: GRO	7011.3	- 22 SAND PACK AND INTERVAL: 22 - 24	.5 #Z/I	<i>-</i>	
ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D ppm	Hanby Result	Well Construction Diagram
55 — 0			NO RECOVERY FROM 0 TO 16 FEET BGS.			
52.5 - 2.5						
47.5 - 7.5						
45 10						
42.5 12.5						
40 15		SM	SILTY SAND: tan, medium dense, moist; 5% clay, 10% silt,			
37.5 — 17.5		SM	medium plasticity, 75% fine to medium sand, 10% fine to medium subrounded gravel. No hydrocarbon odor or staining. SILTY SAND: tan, medium dense, moist; 5% clay, 10% silt, low			

Figure	
	-

Well No.

PROJECT NO.: 4563.01

LOGGED BY: JMW

MW-17S

PROJECT: HPI Fortuna Shell

BORING LOCATION: ALLEY WEST OF 8TH STREET

DATE: 11/1/04 DRILLING METHOD: GEOPROBE **ELEVATION**: 55 Feet msl DRILLER: LAKE'S WELL DRILLING

DEPTH TO WATER: INITIAL \(\frac{\pi}{2} \): NA COMPLETION ₹: NA SITE GEOLOGY: FLUVIAL TERRACE AND COLLUVIAL FAN DEPOSITS

WELL CASING: 1.5" PVC WELL SCREEN AND INTERVAL: 10-slot, 22.5 - 24.5' SEAL AND INTERVAL: GROUT 1.5 - 22' **SAND PACK AND INTERVAL**: 22 - 24.5' #2/16 ELEVATION/ SOIL SYMBOLS. Well P.I.D Hanby USCS SAMPLERS Description Construction ppm Result **DEPTH** AND TEST DATA Diagram plasticity, 85% fine sand. No hydrocarbon odor or staining. SILTY SAND: tan, dense, moist; 10% clay, 15% silt, medium plasticity, 75% fine to medium sand. No hydrocarbon odor or staining. Some manganese stain. 35 20 SILTY SAND: tan, medium dense, moist; 10% clay, 20% silt, 75% fine to medium sand. Slight MTBE odor. Manganese stain. 22.5 32.5 SILTY SAND: tan, medium dense, moist; less than 5% clay, 15% silt, 85% fine sand. Slight MTBE odor. Manganese stain. SILTY SAND: tan, medium dense, moist; 5% clay, 10% silt, 85% fine sand. Slight MTBE odor. 30 - 25 HALT AT 24.5 FEET BGS IN SAME. 27.5 27.5-25 -- 30 22.5 - 32.520 - 35